

CLAIMS

1. A photocurable dental enamel adhesive composition comprising (A) a radically polymerizable monomer having an acid group and a structure represented by the following formula (1):
- 5 $\text{CH}_2=\text{CR}^1-\text{COO}-\text{R}^2-\text{OCO}-\text{R}^3-\text{COOH}$ (1)
- (R^1 is H or CH_3 , and R^2 and R^3 are each independently a divalent inert group essentially composed of C and H), (B) a monofunctional radically polymerizable monomer having a
- 10 molecular weight of 220 or less and a boiling point of $60^\circ\text{C}/10$ mmHg or more, (C) a carboxylic ester group-containing aromatic amine, (D) a photopolymerization initiator and (E) a bifunctional radically polymerizable monomer.
- 15 2. The enamel adhesive composition according to claim 1 which further comprises (F) a filler.
3. The enamel adhesive composition according to claim 1 which comprises 10 to 40 parts by weight of the component
- 20 (A), 2 to 30 parts by weight of the component (B), 0.3 to 3 parts by weight of the component (C), 0.1 to 1 part by weight of the component (D) and 50 to 80 parts by weight of the component (E) based on 100 parts by weight of the total of the components (A), (B), (C), (D) and (E).
- 25 4. The enamel adhesive composition according to claim 2 which comprises 150 to 400 parts by weight of the component (F) based on 100 parts by weight of the total of the components (A), (B), (C), (D) and (E).
- 30 5. The enamel adhesive composition according to any one of claims 1 to 4, wherein the component (A) is 2-methacryloyloxyethylsuccinic acid and/or 2-methacryloyloxyethylphthalic acid.

6. The enamel adhesive composition according to any one of claims 1 to 5, wherein the component (B) is 2-hydroxyethyl methacrylate and/or 2-hydroxypropyl methacrylate.

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7. The enamel adhesive composition according to any one of claims 1 to 6, wherein the component (C) is ethyl p-dimethylaminobenzoate and/or butoxyethyl p-dimethylaminobenzoate.